

10/634,531

- 2 -

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**AMENDMENTS TO THE CLAIMS**

The following listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of claims:**

**Claim 1 (currently amended).** A compound of Formula I



or a pharmaceutically acceptable salt thereof,

wherein:

Z is selected from:

$\text{HO}_2\text{C}$ ;

$\text{HO}(\text{H})\text{N}(\text{O})\text{C}$ ;

$\text{H}(\text{O})\text{C}-\text{N}(\text{OH})$ ;

$\text{CH}_3(\text{O})\text{C}-\text{N}(\text{OH})$ ;

$\text{CH}_3(\text{H})\text{N}(\text{O})\text{C}-\text{N}(\text{OH})$ ;

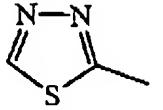
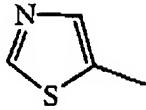
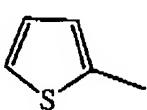
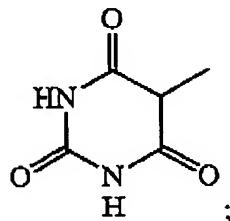
$\text{HS}$ ;

$\text{H}_2\text{N}(\text{O})_2\text{S}$ ;

$\text{CH}_3(\text{H})\text{N}(\text{O})_2\text{S}$ ;

$\text{HO}(\text{O})\text{P}$ ;

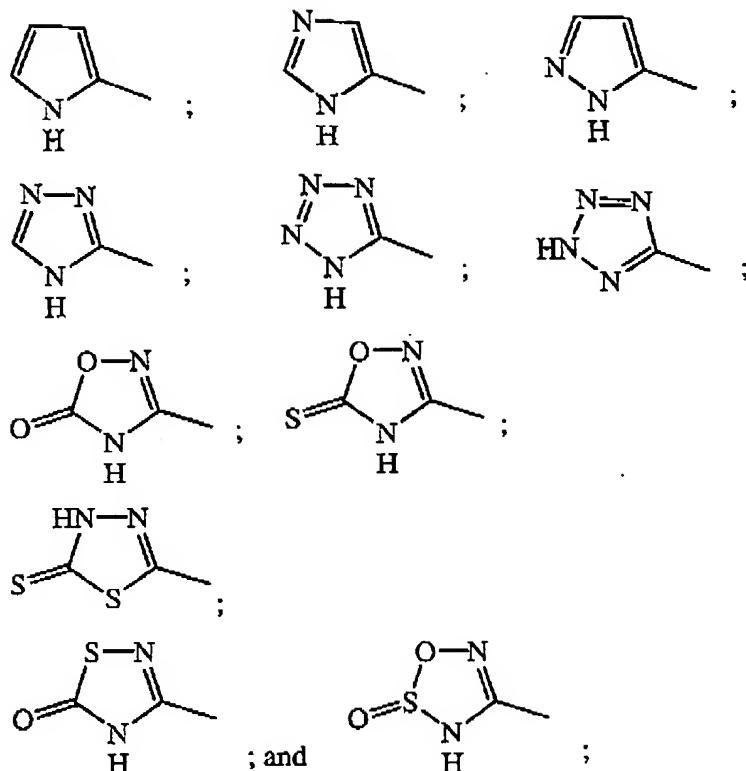
$(\text{HO})_2(\text{O})\text{P}$ ;



10/634,531

- 3 -

Adam Richard Johnson



L is selected from:

C<sub>3</sub>-C<sub>5</sub> alkylene;Substituted C<sub>3</sub>-C<sub>5</sub> alkylene;

3- to 5-membered heteroalkylene; and

Substituted 3- to 5-membered heteroalkylene;

Substituted L groups contain 1 or 2 substituents on a carbon atom or nitrogen atom independently selected from:

HO;

CN; and

CF<sub>3</sub>;

wherein each substituent on a carbon atom may further be independently F, and wherein 2 substituents may be taken together with a carbon atom to which they are both bonded to form the group C=O;

R<sup>1</sup> is independently selected from:

10/634,531

- 4 -

Adam Richard Johnson

C<sub>5</sub> or C<sub>6</sub> cycloalkylenyl-(C<sub>1</sub>-C<sub>8</sub> alkylene);  
Substituted C<sub>5</sub> or C<sub>6</sub> cycloalkylenyl-(C<sub>1</sub>-C<sub>8</sub> alkylene);  
5- or 6-membered heterocycloalkylenyl-(C<sub>1</sub>-C<sub>8</sub> alkylene);  
Substituted 5- or 6-membered heterocycloalkylenyl-(C<sub>1</sub>-C<sub>8</sub> alkylene);  
Phenyl-(C<sub>1</sub>-C<sub>8</sub> alkylene);  
Substituted phenyl-(C<sub>1</sub>-C<sub>8</sub> alkylene);  
5- or 6-membered heteroarylenyl-(C<sub>1</sub>-C<sub>8</sub> alkylene);  
Substituted 5- or 6-membered heteroarylenyl-(C<sub>1</sub>-C<sub>8</sub> alkylene);  
Phenyl;  
Substituted phenyl;  
Naphthyl;  
Substituted naphthyl;  
5- or 6-membered heteroaryl;  
Substituted 5- or 6-membered heteroaryl;  
8- to 10-membered heterobiaryl; and  
Substituted 8- to 10-membered heterobiaryl;

R<sup>2</sup> is independently selected from:

H;  
C<sub>1</sub>-C<sub>6</sub> alkyl;  
Phenyl-(C<sub>1</sub>-C<sub>8</sub> alkylene);  
Substituted phenyl-(C<sub>1</sub>-C<sub>8</sub> alkylene);  
Naphthyl-(C<sub>1</sub>-C<sub>8</sub> alkylene);  
Substituted naphthyl-(C<sub>1</sub>-C<sub>8</sub> alkylene);  
5- or 6-membered heteroaryl-(C<sub>1</sub>-C<sub>8</sub> alkylene);  
Substituted 5- or 6-membered heteroaryl-(C<sub>1</sub>-C<sub>8</sub> alkylene);  
8- to 10-membered heterobiaryl-(C<sub>1</sub>-C<sub>8</sub> alkylene);  
Substituted 8- to 10-membered heterobiaryl-(C<sub>1</sub>-C<sub>8</sub> alkylene);  
Phenyl-O-(C<sub>1</sub>-C<sub>8</sub> alkylene);  
Substituted phenyl-O-(C<sub>1</sub>-C<sub>8</sub> alkylene);  
Phenyl-S-(C<sub>1</sub>-C<sub>8</sub> alkylene);

10/634,531

- 5 -

Adam Richard Johnson

Substituted phenyl-S-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);  
Phenyl-S(O)-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);  
Substituted phenyl-S(O)-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);  
Phenyl-S(O)<sub>2</sub>-(C<sub>1</sub>-C<sub>8</sub> alkylenyl); and  
Substituted phenyl-S(O)<sub>2</sub>-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);

Each substituted R<sup>1</sup> group contains from 1 to 3 substituents, and each substituted R<sup>2</sup> group contains from 1 to 4 substituents, wherein each substituent is independently on a carbon or nitrogen atom, independently selected from:

C<sub>1</sub>-C<sub>6</sub> alkyl;  
CN;  
CF<sub>3</sub>;  
HO;  
(C<sub>1</sub>-C<sub>6</sub> alkyl)-O;  
(C<sub>1</sub>-C<sub>6</sub> alkyl)-S(O)<sub>2</sub>;  
H<sub>2</sub>N;  
(C<sub>1</sub>-C<sub>6</sub> alkyl)-N(H);  
(C<sub>1</sub>-C<sub>6</sub> alkyl)<sub>2</sub>-N;  
(C<sub>1</sub>-C<sub>6</sub> alkyl)-C(O)O-(C<sub>1</sub>-C<sub>8</sub> alkylenyl)<sub>m</sub>;  
(C<sub>1</sub>-C<sub>6</sub> alkyl)-C(O)O-(1- to 8-membered heteroalkylenyl)<sub>m</sub>;  
(C<sub>1</sub>-C<sub>6</sub> alkyl)-C(O)N(H)-(C<sub>1</sub>-C<sub>8</sub> alkylenyl)<sub>m</sub>;  
(C<sub>1</sub>-C<sub>6</sub> alkyl)-C(O)N(H)-(1- to 8-membered heteroalkylenyl)<sub>m</sub>;  
H<sub>2</sub>NS(O)<sub>2</sub>-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);  
(C<sub>1</sub>-C<sub>6</sub> alkyl)-N(H)S(O)<sub>2</sub>-(C<sub>1</sub>-C<sub>8</sub> alkylenyl)<sub>m</sub>;  
(C<sub>1</sub>-C<sub>6</sub> alkyl)<sub>2</sub>-NS(O)<sub>2</sub>-(C<sub>1</sub>-C<sub>8</sub> alkylenyl)<sub>m</sub>;  
3- to 6-membered heterocycloalkyl-(G)<sub>m</sub>;  
Substituted 3- to 6-membered heterocycloalkyl-(G)<sub>m</sub>;  
5- or 6-membered heteroaryl-(G)<sub>m</sub>;  
Substituted 5- or 6-membered heteroaryl-(G)<sub>m</sub>;  
(C<sub>1</sub>-C<sub>6</sub> alkyl)-S(O)<sub>2</sub>-N(H)-C(O)-(C<sub>1</sub>-C<sub>8</sub> alkylenyl)<sub>m</sub>; and  
(C<sub>1</sub>-C<sub>6</sub> alkyl)-C(O)-N(H)-S(O)<sub>2</sub>-(C<sub>1</sub>-C<sub>8</sub> alkylenyl)<sub>m</sub>;

10/634,531

- 6 -

Adam Richard Johnson

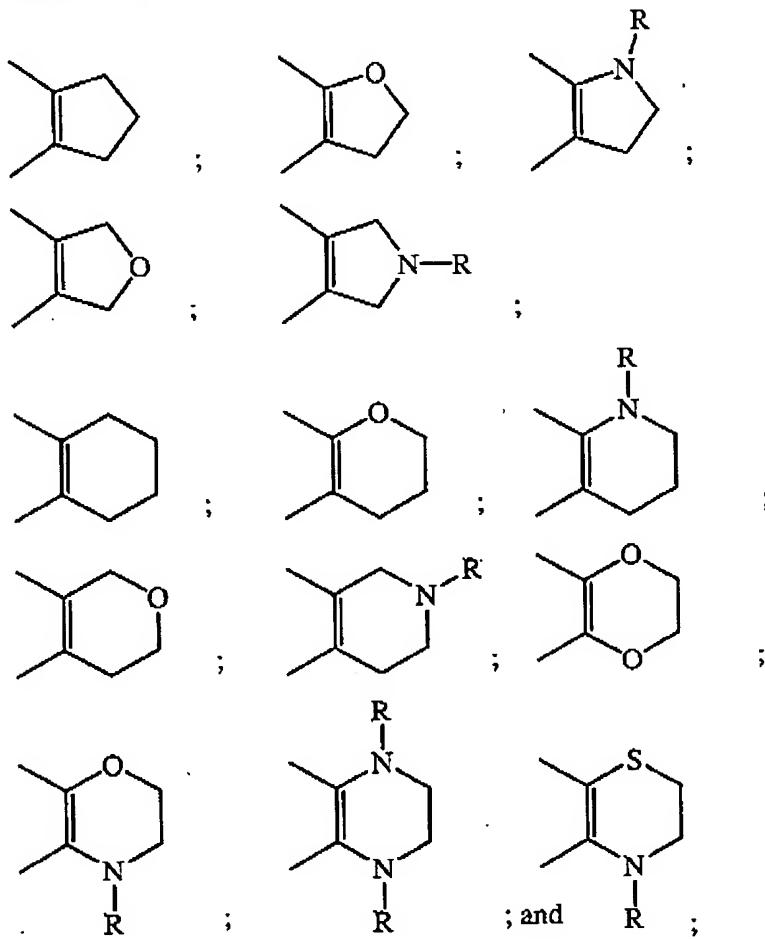
wherein each substituent on a carbon atom may further be independently selected from:

Halo; and

$\text{HO}_2\text{C}$ ;

wherin 2 substituents may be taken together with a carbon atom to which they are both bonded to form the group  $\text{C}=\text{O}$ ;

wherin two adjacent, substantially  $\text{sp}^2$  carbon atoms may be taken together with a diradical substituent to form a cyclic diradical selected from:



R is H or  $\text{C}_1\text{-C}_6$  alkyl;

G is  $\text{CH}_2$ ; O, S,  $\text{S(O)}$ ; or  $\text{S(O)}_2$ ;

Each m is an integer of 0 or 1;

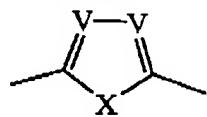
10/634,531

- 7 -

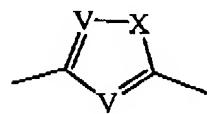
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Q, when bonded to a nitrogen atom in group D, is selected from:

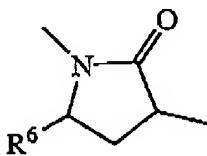
- OC(O);
- CH(R<sup>6</sup>)C(O);
- OC(NR<sup>6</sup>);
- CH(R<sup>6</sup>)C(NR<sup>6</sup>);
- N(R<sup>6</sup>)C(O);
- N(R<sup>6</sup>)C(S);
- N(R<sup>6</sup>)C(NR<sup>6</sup>);
- SC(O);
- CH(R<sup>6</sup>)C(S);
- SC(NR<sup>6</sup>);
- C≡CCH<sub>2</sub>;



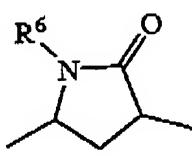
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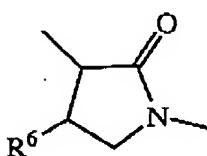
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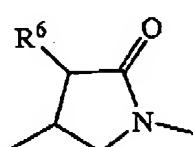
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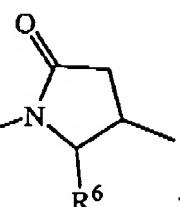
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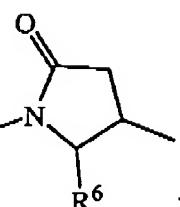
;



;



; and



; and

Q, when bonded to a carbon atom in group D, is as defined above and may further be selected from:

- OCH<sub>2</sub>;
- N(R<sup>6</sup>)CH<sub>2</sub>;
- trans-(H)C=C(H);

10/634,531

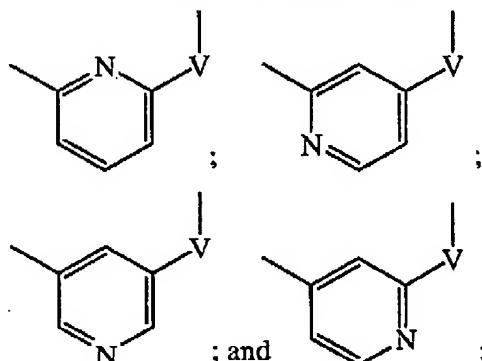
- 8 -

Adam Richard Johnson

 $\text{cis}-(\text{H})\text{C}=\text{C}(\text{H})$ ; $\text{C}\equiv\text{C}$ ; $\text{CH}_2\text{C}\equiv\text{C}$ ; $\text{CF}_2\text{C}\equiv\text{C}$ ; and $\text{C}\equiv\text{CCF}_2$ ;Each  $\text{R}^6$  independently is H,  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_3\text{-C}_6$  cycloalkyl; 3- to 6-membered heterocycloalkyl; phenyl; benzyl; or 5- or 6-membered heteroaryl;X is O, S, N(H), or N( $\text{C}_1\text{-C}_6$  alkyl);

Each V is independently C(H) or N;

D is a cyclic diradical group selected from:



wherein the group D may be unsubstituted or substituted on a carbon atom or a nitrogen atom by replacement of a hydrogen atom with a group selected from:

 $\text{CH}_3$ ; $\text{CF}_3$ ; $\text{C}(\text{O})\text{H}$ ; $\text{CN}$ ; $\text{HO}$ ; $\text{CH}_3\text{O}$ ; $\text{C}(\text{F})\text{H}_2\text{O}$ ; $\text{C}(\text{H})\text{F}_2\text{O}$ ; and $\text{CF}_3\text{O}$ ;

wherein a carbon atom in the group D may further be substituted with F;

10/634,531

- 9 -

Adam Richard Johnson

V<sup>1</sup> is a 5-membered heteroarylenyl containing carbon atoms and from 1 to 4 heteroatoms selected from 1 O, 1 S, 1 NH, 1 N(C<sub>1</sub>-C<sub>6</sub> alkyl), and 4 N, wherein the O and S atoms are not both present, and wherein the heteroarylenyl may optionally be unsubstituted or substituted with 1 substituent selected from fluoro, methyl, hydroxy, trifluoromethyl, cyano, and acetyl;

wherein each C<sub>8</sub>-C<sub>10</sub> bicycloalkyl is a bicyclic carbocyclic ring that contains 8-, 9-, or 10-member carbon atoms which are 5,5-fused, 6,5-fused, or 6,6-fused bicyclic rings, respectively, and wherein the ring is saturated or optionally contains one carbon-carbon double bond;

wherein each 8- to 10-membered heterobicycloalkyl is a bicyclic ring that contains carbon atoms and from 1 to 4 heteroatoms independently selected from 2 O, 1 S, 1 S(O), 1 S(O)<sub>2</sub>, 1 N, 4 N(H), and 4 N(C<sub>1</sub>-C<sub>6</sub> alkyl), and wherein when two O atoms or one O atom and one S atom are present, the two O atoms or one O atom and one S atom are not bonded to each other, and wherein the ring is saturated or optionally contains one carbon-carbon or carbon-nitrogen double bond, and wherein the heterobicycloalkyl is a 5,5-fused, 6,5-fused, or 6,6-fused bicyclic ring, respectively,

wherein each heterocycloalkyl is a ring that contains carbon atoms and from 1 to 4 heteroatoms independently selected from 2 O, 1 S, 1 S(O), 1 S(O)<sub>2</sub>, 1 N, 4 N(H), and 4 N(C<sub>1</sub>-C<sub>6</sub> alkyl), and wherein when two O atoms or one O atom and one S atom are present, the two O atoms or one O atom and one S atom are not bonded to each other, and wherein the ring is saturated or optionally contains one carbon-carbon or carbon-nitrogen double bond;

wherein each heterocycloalkylenyl is a ring diradical that contains carbon atoms and from 1 to 3 heteroatoms independently selected from 1 O, 1 S, 1 S(O), 1 S(O)<sub>2</sub>, 1 N, 2 N(H), and 2 N(C<sub>1</sub>-C<sub>6</sub> alkyl), and wherein when one O atom and one S atom are present, the one O atom and one S atom are not bonded to each other, and wherein the ring is saturated or optionally contains one carbon-carbon or carbon-nitrogen double bond;

10/634,531

- 10 -

Adam Richard Johnson

wherein each 5-membered heteroaryl contains carbon atoms and from 1 to 4 heteroatoms independently selected from 1 O, 1 S, 1 N(H), 1 N(C<sub>1</sub>-C<sub>6</sub> alkyl), and 4 N, and each 6-membered heteroaryl contains carbon atoms and 1 or 2 heteroatoms independently selected from N, N(H), and N(C<sub>1</sub>-C<sub>6</sub> alkyl), and 5- and 6-membered heteroaryl are monocyclic rings; wherein a 5-membered heteroarylenyl is a 5-membered monocyclic diradical ring that contains carbon atoms and from 1 to 4 heteroatoms independently selected from 1 O, 1 S, 1 N(H), 1 N(C<sub>1</sub>-C<sub>6</sub> alkyl), and 4 N, wherein the 1 O atom and 1 S atom are not both present, and 6-membered heteroarylenyl is a 6-membered monocyclic diradical ring that contains carbon atoms and 1 or 2 heteroatoms independently selected from 2 N; wherein each heterobiaryl contains carbon atoms and from 1 to 4 heteroatoms independently selected from 1 O, 1 S, 1 N(H), 1 N(C<sub>1</sub>-C<sub>6</sub> alkyl), and 4 N, and where the 8-, 9-, and 10-membered heterobiaryl are 5,5-fused, 6,5-fused, and 6,6-fused bicyclic rings, respectively, and wherein at least 1 of the 2 fused rings of a bicyclic ring is aromatic, and wherein when the O and S atoms both are present, the O and S atoms are not bonded to each other; wherein with any (C<sub>1</sub>-C<sub>6</sub> alkyl)<sub>2</sub>-N group, the C<sub>1</sub>-C<sub>6</sub> alkyl groups may be optionally taken together with the nitrogen atom to which they are attached to form a 5- or 6-membered heterocycloalkyl; and wherein each group and each substituent recited above is independently selected.

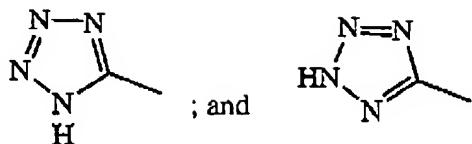
**Claim 2 (original).** The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein Z is HO<sub>2</sub>C.

**Claim 3 (original).** The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein Z is selected from:

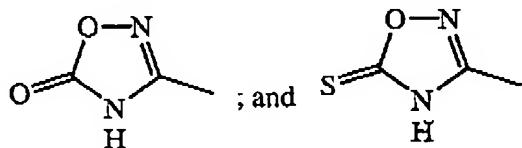
10/634,531

- 11 -

Adam Richard Johnson



**Claim 4 (original).** The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein Z is selected from:



**Claim 5 (original).** The compound according to any one of Claims 1 to 4, or a pharmaceutically acceptable salt thereof, wherein Q is N(R<sup>6</sup>)C(O).

**Claim 6 (original).** The compound according to any one of Claims 1 to 4, or a pharmaceutically acceptable salt thereof, wherein Q is selected from:

C≡C;  
CH<sub>2</sub>C≡C;  
C≡CCH<sub>2</sub>;  
CF<sub>2</sub>C≡C; and  
C≡CCF<sub>2</sub>.

**Claim 7 (canceled).**

**Claim 8 (original).** A pharmaceutical composition, comprising a compound according to Claim 1, or a pharmaceutically acceptable salt thereof, admixed with a pharmaceutically acceptable carrier, excipient, or diluent.

**Claim 9 (canceled).**

10/634,531

- 12 -

Adam Richard Johnson

**Claim 10 (previously presented).** A method for treating osteoarthritis, comprising administering to a patient suffering from osteoarthritis a nontoxic effective amount of a compound according to Claim 1, or a pharmaceutically acceptable salt thereof.

**Claim 11 (canceled).**